

Atty. Docket No.	07451.0022-00000 Serial No. 09/617,148					
Applicant	Umesh Maheshwari,	et al.	· · · · · · · · · · · · · · · · · · ·	_		
Filing Date	July 17, 2000		Group: 2	766		
		U.S. PATEN	T DOCUMENTS			
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Date
Gl	4,309,569	01/05/82	Merkle			21 J. R.
GN	4,827,508	05/02/89	Shear		_	
6N	4,977,594	12/11/90	Shear			HIVED MAILR
GN	5,010,571	04/23/91	Katznelson		-	-D
6n	5,050,213	09/17/91	Shear			ED 2001 LROOM
		FOREIGN PATE	ENT DOCUMENT	TS		
	Document Number	Date	Country	Class	Sub Class	Translation Yes or No
GL	WO 96/27155	09/06/96	PCT			
GIL	WO 97/43761	11/20/97	PCT			
EN	WO 98/09209	03/05/98	PCT			
61	WO 99/01815	01/14/99	PCT			
EN	AU-A-36815/97	04/09/97	Australia			
	OTHER DOCUMEN	TS (Including Au	thor, Title, Date	, Pertinent P	ages, Etc	:-)
6n	Paul Ammann, et a Symp. on Security	I., <u>Surviving Inform</u> and Privacy, May	nation Warfare At 4-7, 1997, pages	tacks On Da 164-174.	<u>tabases,</u> F	Proc. 1997, IEEE
611	Mihir Bellare, et al., and Engineering De	Forward Integrity epartment, University	for Secure Audit sity of California a	<u>Logs,</u> Techn at San Diego,	ical Repor 1997, paç	t, Computer Science ges 1-16.
6n	Trevor Blackwell, e 1995 USENIX Tech					Systems, Proc. of the
Examiner	Givan Lee		Date Considere	ed '/	1/2000	<i>L</i>
t	Initial if reference conside through citation if not in communication to application	conformance and r		onformance v	vith MPEP	609; draw line
Form PTO 1449		Patent and	Trademark C	Office - U.S	. Departi	ment of Commerce

	ADEMARK					<u> </u>
Atty. Docket No	. 07451.0022-00000		Serial No. 0	9/617,148		CRE
Applicant	Umesh Maheshwari,	et al.				PHCH PANI
Filing Date	July 17, 2000		Group: 2	766		= =
		U.S. PATE	NT DOCUMENTS		<u></u>	CEIVED
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Giling Date
GN	5,136,648	08/04/92	Olson, et al.			
GIL	5,247,575	09/21/93	Sprague, et al.			
GL	5,319,705	06/07/94	Halter, et al.			
GN	5,394,469	02/28/95	Nagel, et al.			
6n	5,410,598	04/25/95	Shear			
		FOREIGN PA	TENT DOCUMENT	S		
	Document Number	Date	Country	Class	Sub Class	Translation Yes or No
GIL	AU-A-36840/97	04/09/97	Australia			
	OTHER DOCUMEN	TS (Including A	Author, Title, Date,	Pertinent P	ages, Etc.)	1
6u	Matt Blaze, A Crypt Computing Security			ACM Confe	rence on Co	ommunications and
bN	Manuel Blum, et al. Computer Science,			ories, Proc.	IEEE Conf.	on Foundations of
6n	Miguel Castro, et al Design and Implem			ce, Third Sy	mposium or	Operating Systems
GI	Frederick B. Cohen Security, 12(6), Else					Computers &
6n	Kevin Fu, et al., Fas Operating System [
6n	Juan A. Garay, et a Algorithms, 1997, p		outed Storage and F	Retrieval, 11	th Intl. Work	shop on Distributed
GL	Norman C. Hutchin Operating System I	son, et al., <u>Logic</u> Design and Imple	al vs. Physical File ementation, Feb., 1	System Bac 999, 12 page	kup, Proc. o	of the 3 rd Symp. on
Examiner	Corace C	11	Date Considere	d Lan	12004	
*Examiner:	Initial if reference consider through citation if not in communication to applications.	ered, whether or conformance and		nformance v	vith MPEP 6	609; draw line
Form PTO 1449	<u> </u>	Dotont or	nd Trademark O			

Atty. Docket No. 07451.0022-00000		Serial No. 09/6	517,148			
Applicant	Umesh Maheshwari, e	et al.				
Filing Date	July 17, 2000		Group: 276	6		
		U.S. PATENT	DOCUMENTS			J.C
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	2 Filing Date
61	5,713,018	01/27/98	Chan			四 二 二
61	5,794,252	08/11/98	Bailey, et al.			EIVED 1 2001 MAILROOM
GIL	5,826,268	10/20/98	Schaefer, et al.) 1 ROO
EN	5,892,900	04/06/99	Ginter, et al.			3
61	5,910,987	06/08/99	Ginter, et al.			
Gn	6,016,490	01/18/00	Watanabe, et al.			
Gr V	6,044,370	03/28/00	Anfindsen			
FOREIGN PATENT DOCUMENTS						
	Document Number	Date	Country	Class	Sub Class	Translation Yes or No
	OTHER DOCUMEN	ΓS (Including Aut	hor, Title, Date, P	ertinent P	ages, Etc	.)
Gu	Oliver Kommerling, the USENIX Worksh					Processors, Proc. of -20.
Gri	Hugo Krawczyk, <u>Dis</u> Annual ACM Symp.					
Gi	Per-Ake Larson, Dy pages 446-457.	namic Hash Table	s, Communications	of the AC	M, Vol. 31	, No. 4, April, 1988,
br	David B. Lomet, <u>The</u> Workshop on High F	Case for Log Stru Performance Trans	ucturing in Databas saction Systems, 19	se Systems 995, pages	s, Proceed s 1-5.	ings of the 6 th Int'l
GN	Ralph C. Merkle, Pre Security and Privacy				the 1980 S	Symposium on
Examiner	Grace 120		Date Considered	1/27	1004	· ·
thr	tial if reference conside ough citation if not in communication to applica	onformance and n		ormance w	ith MPEP	
Form PTO 1449		Patent and	Trademark Offi	ce - U.S.	Departr	ment of Commerce



Atty. Docket No.	y. Docket No. Serial No.									
Applicant						10				
Filing Date			Group:			RE JA 210				
		U.S. PATENT	DOCUMENTS			N I				
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Date				
						If Appropriate				
						<u></u>				
FOREIGN PATENT DOCUMENTS										
	Document Number	Date	Country	Class	Sub Class	Translation Yes or No				
			<u> </u>							
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)										
Gi	Niels Provos, <u>Encry</u> 17, 2000, 10 pages.	Niels Provos, Encrypting Virtual Memory, Proc. of the 9 th USENIX Security Symposium, Aug. 14-17, 2000, 10 pages.								
GIL		Michael O. Rabin, Efficient Dispersal of Information for Security, Load Balancing, and Fault Tolerance, Journal of the ACM, Vol. 36, No. 2, April, 1989, pages 335-348.								
GL		Mendel Rosenblum, et al., <u>The Design and Implementation of a Log-Structured File System</u> , Proc. of the 13 th ACM Symposium on Operating Systems Principles, 1991, pages 1-15.								
GI		Mendel Rosenblum, et al. <u>The Design and Implementation of a Log-Structured File System</u> , ACM Transactions on Computer Systems, Vol. 10, No. 1, Feb., 1992, pages 26-52.								
GIL	Bruce Schneier, et a 7 th USENIX Security				Intrusted N	fachines, Proc. of the				
Cost	Bruce Schneier, App	lied Cryptography	ر, Second Edition,	John Wiley	& Sons, 1	996, pages. 233-482.				
GL	Margo Seltzer, et al. the 1993 Winter USB					Jnix, Proceedings of				
GL	Sean W. Smith, et al Intl. Conf. on Financ					rocessor, Second				
GI		Tatu Ylonen, Shadow Paging is Feasible, Licentiate's Thesis, Helsinki University of Technology, April 27, 1994, pages 1-149.								
Examiner	Grave Lee		Date Considered	1/20	1/200	7				
t	nitial if reference conside hrough citation if not in co communication to applica	onformance and n				•				
Form PTO 1449		Patent and	Trademark Off	ice - U.S.	Departr	nent of Commerce				



Atty. Docket No.	07451.0022-00000		Serial No. 09/	617,148	01,	O.K.		
Applicant	Umesh Maheshwari,	et al.		be		`\		
Filing Date	July 17, 2000		Group: 276	· · · · · · · · · · · · · · · · · · ·	FB 05 2	001		
		U.S. PATEN	DOCUMENTS	F	& .	A STATE OF THE STA		
Examiner Initial*	Document Number	Date	Name	Class	Class	Filing Date If Appropriate		
					Ť	ECEIVED		
					F	EB - 6 2001		
						nology Center 2100		
				_				
FOREIGN PATENT DOCUMENTS								
	Document Number	Date	Country	Class	Sub Class	Translation Yes or No		
61	EP 0 715 246 A1	06/05/96	EP					
Gr	WO 99/14652	03/25/99	PCT					
			<u> </u>					
	OTHER DOCUMEN	TS (Including Au	thor, Title, Date, F	Pertinent P	ages, Etc	.)		
Examiner	Girace Lel		Date Considered	1/21/	4 vo			
thi								
Form PTO 1449		Patent and	Trademark Off	ice - U.S.	. Departr	nent of Commerce		



INFORMATION DISCLOSURE CITATION

Atty. Docket No.:	07451.0022-00000	Serial No.:	09/617,148
Applicants:	Umesh Maheshwari, et al.		
Filing Date:	July 17, 2000	Group:	2766

Examiner Initial*		Document Number					Class	Sub Class	Filing Date If Appropriate
	`	5,920,861	07/06/99	Hall, et al.					
		5,940,504	08/17/99	Griswold			RECEIVE		
		5,943,422	08/24/99	Van Wie, et al.					
$\bigcap \mathcal{A}$		5,999,949	12/07/99	Crandall			APR 1 5 2002		
Q -		6,112,181	08/29/00	Shear, et al.			Technology Center 2		
		6,157,721	12/05/00	Shear, et al.					
		6,185,683	02/06/01	Ginter ,et al.			,		
		US2001/00 4204 3A1	11/15/01	Shear, et al.					

Examiner Initial*	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
\bigcirc	AU-A-36840/97	02/19/98	Australia			
(1)	WO 98/10381	03/12/98	PCT			
() ()	WO 99/48296	09/23/99	PCT			

		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
		Ross Anderson, et al., "Tamper Resistance - a Cautionary Note", The Second USENIX Workshop on Electronic Commerce Proceedings, Oakland, California, November 18-21, 1996, pages 1-11.
		M.P. Atkinson, et al., "The Computer Journal", The Computer Society, Vol. 26, No. 4, November 1983, 6 pages.
		David Aucsmith, "Tamper Resistant Software: An Implementation", First International Workshop, Cambridge, United Kingdom, May 30-June 1, 1996, pages 317-333.
$\bigcap Q$	Л	Mihir Bellare, et al., "Forward Integrity for Secure Audit Logs", Dept. of Computer Science and Engineering, University of California San Diego, November 23, 1997, 16 pages.
66-	;	Michael J. Carey, et al., "The Exodus Extensible DBMS Project: An Overview", Computer Sciences Department, University of Wisconsin, Madison, Wisconsin, pages 1-26.
		Arvola Chan, et al., "The Implementation of An Integrated Concurrency Control and Recovery Scheme", International Conference on Management of Data, ACM SIGMOD, June 2-4, 1982, pages 184-191.
	/	C. Collberg, "Manufacturing Cheap, Resilient, and Stealthy Opaque Constructs", ACM Press, ACM SIGPLAN-SIGACT, pages 184-196.
		Wiebren de Jonge, et al., "The Logical Disk: A New Approach to Improving File Systems", Dept. of Mathematics and Computer Science, Vrije Universiteit, Amsterdam, 14 pages.

APR 1 1 2002 INFORMATION DISCLOSURE CITATION

Atty. Docket No.:	0AMED022-00000	Serial No.:	09/617,148	HECENED
Applicants:	Umesh Maheshwari, et al.			APR 1 5 2002
Filing Date:	July 17, 2000	Group:	2766	Technology Center 2100

Filling Date.	July 17, 2000	Отоар.	2100	cantar
	OTHER DOCUMENTS (Including A	Author, Title, Date	, Pertinent Pages,	etc.)
	J. Gray, "The Benchmark Handbook f Kaufmann, 1991.	for Database and T	ransaction Proceed	ing Systems", Morgan
	Jim Gray, et al., "The Recovery Mana Surveys, Vol. 13, No. 2, June 1981, p		tem R Database Ma	inager", ACM Computing
	J. Gray and A. Reuter, "Transaction F 1993.	Processing: Conce	pts and Techniques	, Morgan Kaufmann,
	C.A.R. Hoare, et al., "An Operating States 1974, pages 549-557.	ystem Structuring (Concept", Communi	cations of the ACM,
	Deborah Jing-Hwa Hwang, "Function-MIT, February 1994 172 pages.	-Based Indexing fo	r Object Oriented Da	atabases", Ph.D. Thesis,
	A. Kemper, et al., "Function Materializ International Conference on Manager			
	Charles Lamb, et al.,"The Objectstore 10, October 1991, pages 50-63.	Database System	", Communications	of the ACM, Vol. 34, No.
	B. Liskov, et al., "Safe and Efficient SI Issue 2, June 1996, pages 318-329.	haring of Persisten	t Objects in Thor", A	ACM SIGMOD, Vol. 25,
36%	David Maier, et al., "Indexing in an Ob Oriented Database Systems, IEEE Co 182.			
	David Mazieres, et al., "Separating Ke Symposium on Operating Systems Pr			
	J. Melton and A. Simon. The New SC	QL: A Complete Gu	ide. Morgan Kaufma	ann, 1993.
	A. Menzes, P. van Oorschot, and S. \	/anstone, "Handbo	ok of Applied Crypto	ography", CRC Press,
	Ralph C. Merkle, "Protocols For Publi Security and Privacy, Oakland, Califo of Congress, 1980, pages 122-134.			
	C. Mohan, et al., "Aries/IM: An Efficie Write-Ahead Logging", The Association			
	J. Eliot B. Moss, "Working with Persis Information Science, University of Ma 39.			
	Margo I. Seltzer, et al., "Challenges in Proceedings of the Embedded System			
	Sean W. Smith, et al., "Using a High-I Proceedings of the Second Internation			
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		

(APR 1 1 2002



OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION

Atty. Docket No.:	07451.0022-00000	Serial No.:	09/617,148	RECEIVED
Applicants:	Umesh Maheshwari, et al.			APR 1 5 2002
Filing Date:	July 17, 2000	Group:	2766	Technology Center 2100

	= sy center 21
	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
	Olin Sibert, et al., "DigiBox: A Self-Protecting Container for Information Commerce", Proceedings of the first USENIX Workshop on Electronic Commerce, New York, NY, July 1995, 13 pages.
	Michael Stonebraker, "The Design of the Postgres Storage System", Navy Electronics Systems Commander, EECS Department, University of California, Berkeley, California, pages 1-18.
36.	"Cryptographic Security and Key Management Systems - the nFast/KM Solution", nCipher Corp. Limited, January 1998, http://www.ncipher.com/products/rscs/downloads/whitepapers/key.pdf
	"Product Standard Data Management: ISAM", The Open Group, January 1998, 4 pages.
1	

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce